What is claimed is:

- 1. A catalyst for an addition reaction between an active hydrogen-containing organic compound and a glycidyl ether, comprising a complex oxide of magnesium and at least one element other than magnesium selected from the group consisting of the elements in the third period and the fourth period in the periodic table.
- 2. The catalyst according to claim 1, comprising a complex oxide of magnesium and at least one element selected from aluminum and zinc.
- 3. A process for producing a glycidyl ether adduct, which comprises subjecting an active hydrogen-containing organic compound and a glycidyl ether to an addition reaction in the presence of a catalyst comprising a complex oxide of magnesium and at least one element other than magnesium selected from the group consisting of the elements in the third period and the fourth period in the periodic table.
- 4. The process according to claim 3, wherein the active hydrogen-containing organic compound and the glycidyl ether are subjected to the addition reaction in the presence of a catalyst comprising a complex oxide of

magnesium and at least one element selected from aluminum and zinc.

- 5. The process according to claim 3 or 4, wherein the active hydrogen-containing organic compound is a hydroxyl group-containing compound.
- 6. The process according to claim 5, wherein the hydroxyl group-containing compound is at least one selected from the group consisting of linear or branched monohydric alcohols having 1 to 30 carbon atoms, polyols having 2 to 18 carbon atoms and 2 to 18 hydroxyl groups and ketals thereof, polyoxyalkylene alkyl ethers, and mixtures thereof.
- 7. The process according to any of claims 3 to 6, wherein the active hydrogen-containing organic compound is at least one selected from the group consisting of ethylene glycol, 1,2-propanediol, 1,3-propanediol, glycerin, pentaerythritol, diglycerin, polyglycerin, sorbitol, glucose, sucrose, glycerin ketal, and mixtures thereof.
- 8. The process according to any of claims 3 to 7, wherein the glycidyl ether is represented by Formula (1):

$$ROCH_2-CH-CH_2 \qquad (1)$$

wherein R represents a linear or branched alkyl or alkenyl group having 1 to 36 carbon atoms or a phenyl group.

- 9. The process according to any of claims 3 to 8, wherein the glycidyl ether adduct is a product in which one glycidyl ether is added.
- 10. A process for producing a product in which one glycidyl ether is added, which comprises subjecting a glycidyl ether and an active hydrogen-containing organic compound to an addition reaction in a mole ratio of the glycidyl ether to the organic compound in a range of from 1 : 0.9 to 1 : 3 in the presence of a catalyst comprising a complex oxide of magnesium and at least one element other than magnesium selected from the group consisting of the elements in the third period and the fourth period in the periodic table.
- 11. A process for producing a product in which two glycidyl ethers are added, which comprises subjecting a glycidyl ether and an active hydrogen-containing organic

compound to an addition reaction in a mole ratio of the glycidyl ether to the organic compound in a range of from 1.8:1 to 3:1 in the presence of a catalyst comprising a complex oxide of magnesium and at least one element other than magnesium selected from the group consisting of the elements in the third period and the fourth period in the periodic table.